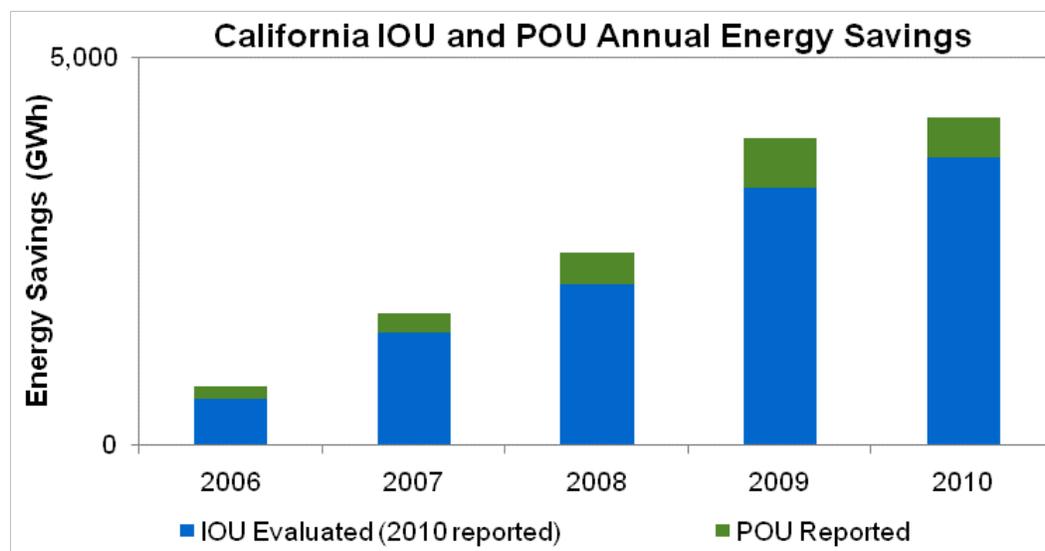


California Clean Energy Future Metrics

Energy Efficiency

Figure 1 shows California IOU and POU Energy Savings from 2006 to 2010. Data are net annual energy savings for POUs and 2006-2008 for IOUs. 2009 and 2010 data for IOUs are gross energy savings.

Figure 1: California IOU and POU Annual Energy Savings

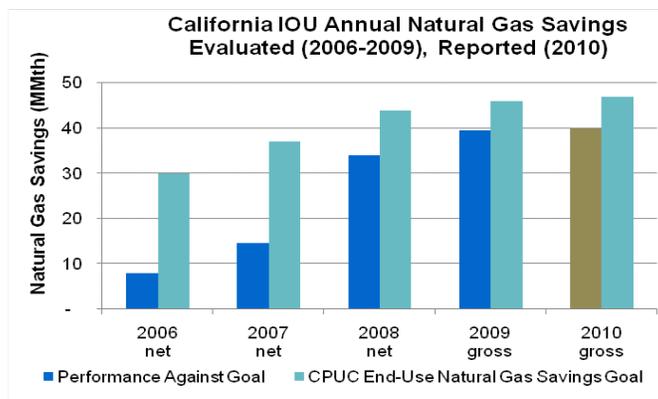
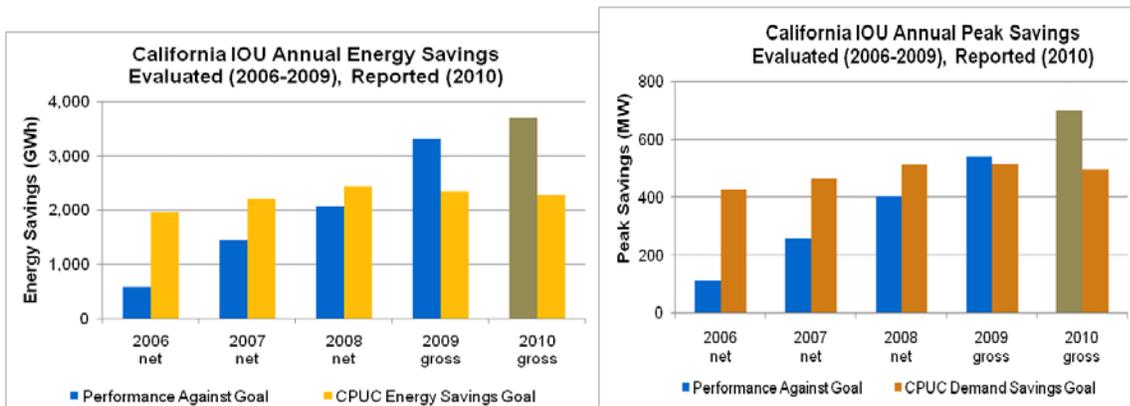


Figures ____ [note figure numbers will be updated prior to public release] show the IOUs' annual energy savings, peak savings, and natural gas savings for program years 2006-2010. Also, these figures include the IOUs' performance against these goals. Goals for energy savings, peak savings, and natural gas savings are established by the CPUC for the IOUs. The current goals are based on historical savings assumptions and state policies for achieving greenhouse reductions. The data and goals for IOUs are net for 2006-2008 and gross for 2009 and 2010.

IOU data for 2006-2009 are evaluated savings. Evaluated savings are based on field performance research and load impact analyses of the installations that were reported during 2006-2009 program cycle. No evaluation studies have been completed for IOUs for 2010 so only reported savings are available. Reported savings are based on the utility records of installed technologies and the savings from those technologies based on pre-evaluation assumptions.

Figure _ shows the IOUs' annual energy savings for 2006 and 2007 were substantially below the goals for those years. In 2009 IOUs' energy savings exceeded the 2009 goal. Reported data for 2010 also exceed the goal for that year. Figure ____ shows a similar trend for annual peak savings.

Figure ____ shows California IOU savings of end-use natural gas for 2006-2010. Natural gas savings were substantially below the goals for 2006 and 2007, but have come closer to achieving the goals for 2008-2010.

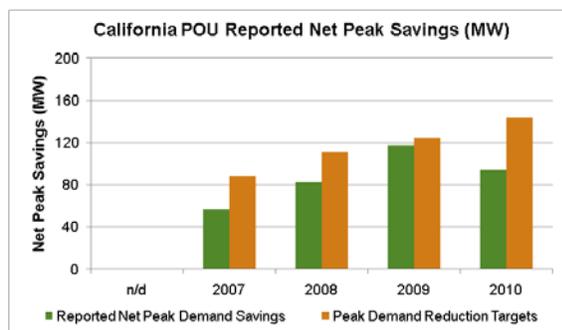
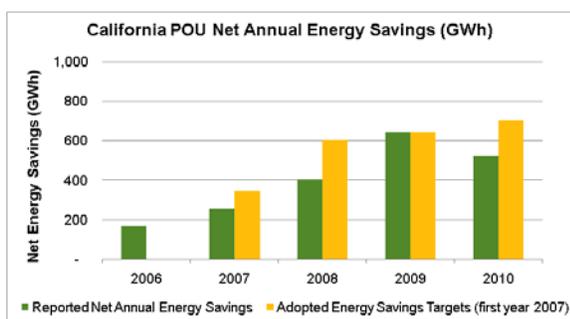


IOU data for these figures came from the following sources:

- 1) CPUC, Decision 09-09-047, DECISION APPROVING 2010 TO 2012 ENERGY EFFICIENCY PORTFOLIOS AND BUDGETS, pp. 45-46.
<http://docs.cpuc.ca.gov/Published/Graphics/107829.pdf>.
- 2) California Public Utilities Commission, 2006-2008 Energy Efficiency Evaluation Report, page ii. The report shows total savings for 2006-2008.
<http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/EM+and+V/2006-2008+Energy+Efficiency+Evaluation+Report.htm>
- 3) California Public Utilities Commission, 2009 Energy Efficiency Evaluation Report, page 4.
http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/EM+and+V/2009_Energy_Efficiency_Evaluation_Report.htm
- 4) IOU reported savings for 2010 are from State of California, Energy Efficiency Groupware Application (EEGA). These data have not been evaluated or verified. <http://eega.cpuc.ca.gov/>

California POUs offering efficiency programs are 39 locally controlled entities ranging in size from the state’s third largest utility, Los Angeles Department of Water and Power, to very small entities serving fewer than a thousand customers. Figures ___ show the POUs' net annual energy savings, and net peak savings reported by the utilities. A net adjustment removes savings that might have occurred even without the program. The reported data are adjusted by a .8 net-to-gross ratio. These savings have not been adjusted to reflect results of evaluation, measurement and verification. Estimated energy and peak savings and program cost-effectiveness are determined using an analytical tool from E3, which is similar to that of the IOUs.

Figure ___ shows that POU net annual energy savings in 2009 were more than 640 GWh, achieving the adopted energy savings for that year. POU energy savings dropped in 2010 to about 520 GWh, achieving only about 75 percent of the 700 GWh goal. Nearly 65 percent of the peak savings goal was reached in 2010. The POUs spent approximately 15 percent less on energy efficiency programs in 2010, the first drop in funding since annual reporting was instituted by the Legislature in 2005



Under SB 1037 (Kehoe, Chapter 366, Statutes of 2005) and AB 2021 (Levine, Chapter 734, Statutes of 2006), annual (historical) POU energy efficiency savings and expenditures are reported to the Energy Commission on March 15. Every 3 years, starting in June 2007, the POUs update their efficiency potential estimates and revise their 10-year targets.. Working in collaboration with the CPUC to obtain IOU potential and goals information, the Energy Commission then establishes a statewide efficiency goal. Most POUs revised their efficiency potential and goals in 2010. The Energy Commission has not set a new statewide goal, however, because of delays in completing new potential studies by the IOUs and the larger POUs.

AB 2021 directs POUs to “first acquire all available energy efficiency and demand reduction resources that are cost-effective, reliable, and feasible.” POUs, as IOUs, are to treat efficiency as a procurement investment. AB 2021 also calls for POUs to report annually on “the results of an independent evaluation that measures and verifies the energy efficiency savings and reduction in energy demand achieved by its energy efficiency and demand reduction programs. There are two primary purposes: 1) to credibly document program impacts; and 2) to improve program designs and operations to be more cost-effective. Since the passage of AB 2021, 16 POUs have filed at least one impact evaluation study with

the Energy Commission. The POUs are very diverse in size, customer types, and program delivery approaches, making it difficult to issue “one-size-fits-all” prescriptive guidelines for evaluation activities. Energy Commission staff continue to work with the POUs to improve the evaluation process to achieve verified savings reductions and to expand their program funding.

For more information see:

Klein, Gary and Michael Messenger. 2007. *Achieving All Cost-Effective Energy For California*. California Energy Commission, CEC200-2007-019SF.

<http://www.energy.ca.gov/2007publications/CEC-200-2007-019/CEC-200-2007-019-SF.PDF>

Lewis, Kae and Irene Salazar. 2008. *Achieving Cost-Effective Energy Efficiency for California: An AB 2021 Progress Report*, California Energy Commission, Electricity Supply Analysis Division, CEC-200-2008-007.

<http://www.energy.ca.gov/2008publications/CEC-200-2008-007/CEC-200-2008-007.PDF>

Lewis, Kae, Nicholas Fugate, Che McFarlin, and Irene Salazar. 2009. *Achieving Cost-Effective Energy Efficiency for California: 2008 Progress Report*. California Energy Commission, Electricity Supply Analysis Division, CEC-200-2009-008-SF.

<http://www.energy.ca.gov/2009publications/CEC-200-2009-008/CEC-200-2009-008-SF.PDF>

Lewis, Kae, Che McFarlin, Cynthia Rogers, Nick Fugate, Doug Kemmer. 2010. *2009 AB 2021 Progress Report: Achieving Cost-Effective Energy Efficiency for California*. California Energy Commission, Electricity Supply Analysis Division. CEC-200-2010-006.

<http://www.energy.ca.gov/2010publications/CEC-200-2010-006/CEC-200-2010-006.PDF>

The 2010 AB 2021 report will be published in August 2011. This report will contain newly updated potential estimates and 10-year goals for the POUs.